

Claims

1. A polymeric film having linear tear properties, the film having been produced by blowing or casting and comprising a layer of a blend of a cyclic olefin copolymer and a polyethylene.
2. A film according to claim 1, wherein the cyclic olefin copolymer has a glass transition temperature  $T_g$  of greater than  $30^{\circ}\text{C}$ .
3. A film according to claim 1 or claim 2, wherein the cyclic olefin copolymer has a glass transition temperature  $T_g$  of less than  $220^{\circ}\text{C}$ .
4. A film according to any of the preceding claims, wherein the cyclic olefin copolymer has a glass transition temperature of from  $50$  to  $175^{\circ}\text{C}$ .
5. A film according to any of the preceding claims, wherein the cyclic olefin copolymer comprises a norbornene/ethylene copolymer.
6. A film according to claim 5, wherein the norbornene/ethylene copolymer contains from 20 to 80 weight percent of units derived from norbornene.
7. A film according to any of the preceding claims, wherein the polyethylene comprises a linear low density polyethylene, a linear medium density polyethylene, or a low density polyethylene.
8. A film according to any of the preceding claims, wherein the polyethylene has a density in the range of from  $0.915\text{g/cm}^3$  to  $0.935\text{g/cm}^3$ .

9. A film according to any of the preceding claims, wherein the blend comprises from 10 to 90 wt% of a cyclic olefin copolymer and from 90 to 10 wt% of a polyethylene.
10. A film according to any of the preceding claims, including at least one further polymeric layer.
11. A film according to claim 10, including at least two further polymeric layers with the layer of the blend between two of such layers.
12. A film according to claim 10 or claim 11, wherein the further polymeric layer or layers comprise a polyolefin optionally containing units derived from vinyl acetate.
13. A film according to claim 12, wherein the polyolefin of the further polymeric layer or layers comprises low density polyethylene, linear low density polyethylene, linear medium density polyethylene, or an ethylene/vinyl acetate copolymer.
14. A film according to any of the preceding claims, which has been produced by blowing and has expansion ratios in both the machine and transverse directions of up to 2:1.
15. A film according to any of claims 1 to 13, which has been produced by casting.
16. A film according to claim 1, substantially as herein described.
17. A package comprising a film according to any of the preceding claims sealed around an article.
18. A package according to claim 17, which includes a breathable patch sealed thereto.

19. A package according to claim 17 or claim 18, wherein the article comprises medical equipment.

20. A package according to claim 17, substantially as herein described.